



# Agency/Tribal Wildlife Summit

October 15, 2004

# Demographics and Interest Areas

## 9 Participants:

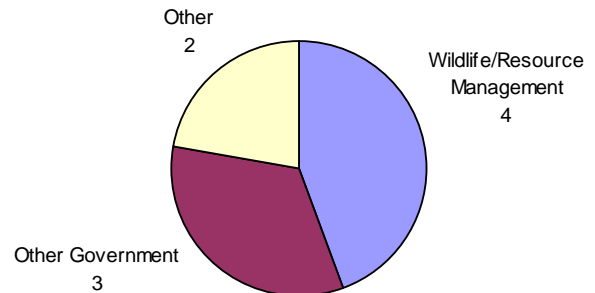
- Carol Beardmore, Sonoran Joint Venture
- David BeMiller, US Border Patrol, Tucson Sector
- Brian Davidson, ADEQ
- Katie Decker, Arizona Department of Agriculture
- Elisabeth Lawaczek, ADHS
- Mark Martinez, USFWS
- Henry Messing, US Bureau of Reclamation
- Susan Schuhardt, Prescott National Forest
- Steve Smarik, USDA-NRCS

The participants were asked to indicate which stakeholder group they were representing during the summit and to identify their personal interests.

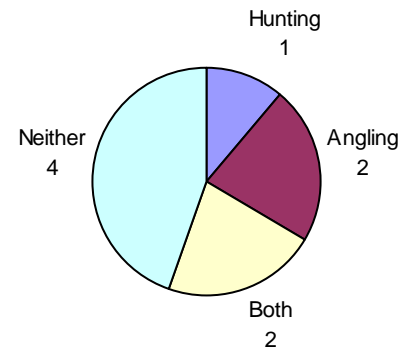
Demographic results indicate the group was fairly homogenous:

- 7 represent a government agency (Figure A-1.)
- 5 hunt and/or fish (Figure A-2.)
- 7 watch wildlife away from home (Figure A-3.)
- 2 use off-highway vehicles and 1 uses an off-highway vehicle to launch a boat (Figure A-4.)
- 9 garden and/or watch wildlife at their home (Figure A-5.)

**Figure A-1: Participant Representation**



**Figure A-2: Hunting and Fishing**



**Figure A-3: Wildlife**

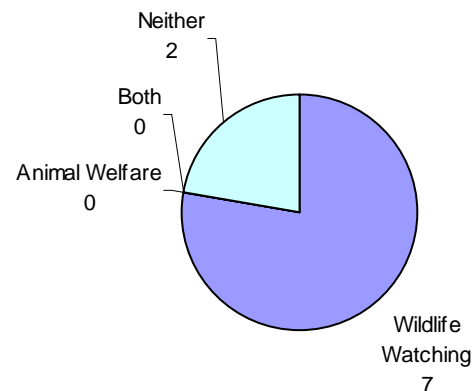


Figure A-4: Recreation

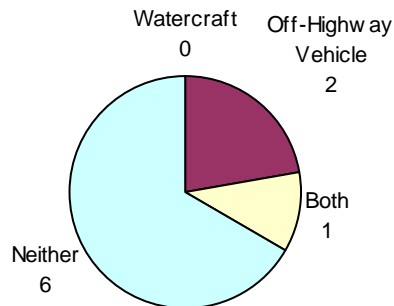
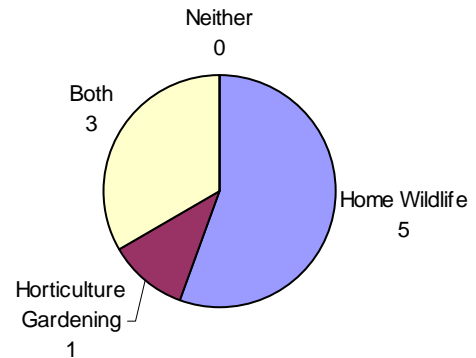


Figure A-5: Home Activities



## Part 1: Arizona Game and Fish's 12 Challenges

During recent strategic planning efforts, the Arizona Game and Fish Department (AZGFD) staff identified 12 challenge areas. Summit participants were asked to review the list and determine **“Which one of these challenges is the most important in achieving the AZGFD’s mission.”**

***Agency Mission:** To conserve, enhance, and restore Arizona's diverse wildlife resources and habitats through aggressive protection and management programs, and to provide wildlife resources and safe watercraft and off-highway vehicle recreation for the enjoyment, appreciation, and use by present and future generations.*

The following is a description of each of the 12 challenges used during the Summit. The capital word in parentheses is the keyword used to identify the challenge on the CoNexus® graphs.

- **Planning and Funding** – Manage wildlife resources as a public trust through efficient and funded activities. (PLAN)
- **Biological Information** – Ensure that biological information used in decision making is accurate and used to implement multi-use land management. (BIO INFO)
- **Wildlife Management** - Make wildlife decisions that reflect sound science and values. (MANAGE)
- **Wildlife Habitat** - Work to ensure habitat is protected and properly managed for wildlife. (HABITAT)

- **Partnerships** – Develop partnerships that recognize wildlife as a public trust. (PARTNER)
- **Laws and Legal Considerations** – Ensure laws and policies are sufficient to protect wildlife and their habitats. (LEGAL)
- **Law Enforcement** - Enforce laws to protect wildlife, public health and safety and sustain recreation opportunities. (ENFORCE)
- **Wildlife Recreation** – Provide ample wildlife recreation opportunities for the full spectrum of wildlife recreation users. (RECREAT)
- **Information and Education** – Provide the public wildlife information and education. (EDUCATION)
- **Off-Highway Vehicle Management** – Manage off-highway vehicles impacts on wildlife and their habitats. (OHV)
- **Watercraft Management** - Manage watercraft impacts on wildlife and their habitats. (WATERCRAFT)
- **Administrative Challenges** – Maintain effective agency through sound fiscal management, business practices and well-trained workforce. (ADMIN)

A dual-paired comparison was used to determine which challenges were the most important to the Summit participants. Participants were also asked to rate how well the AZGFD was performing today in each of the challenge areas.

Overwhelmingly, the group agreed that working to ensure that habitats are protected and properly managed for wildlife was the most important challenge for the Department.



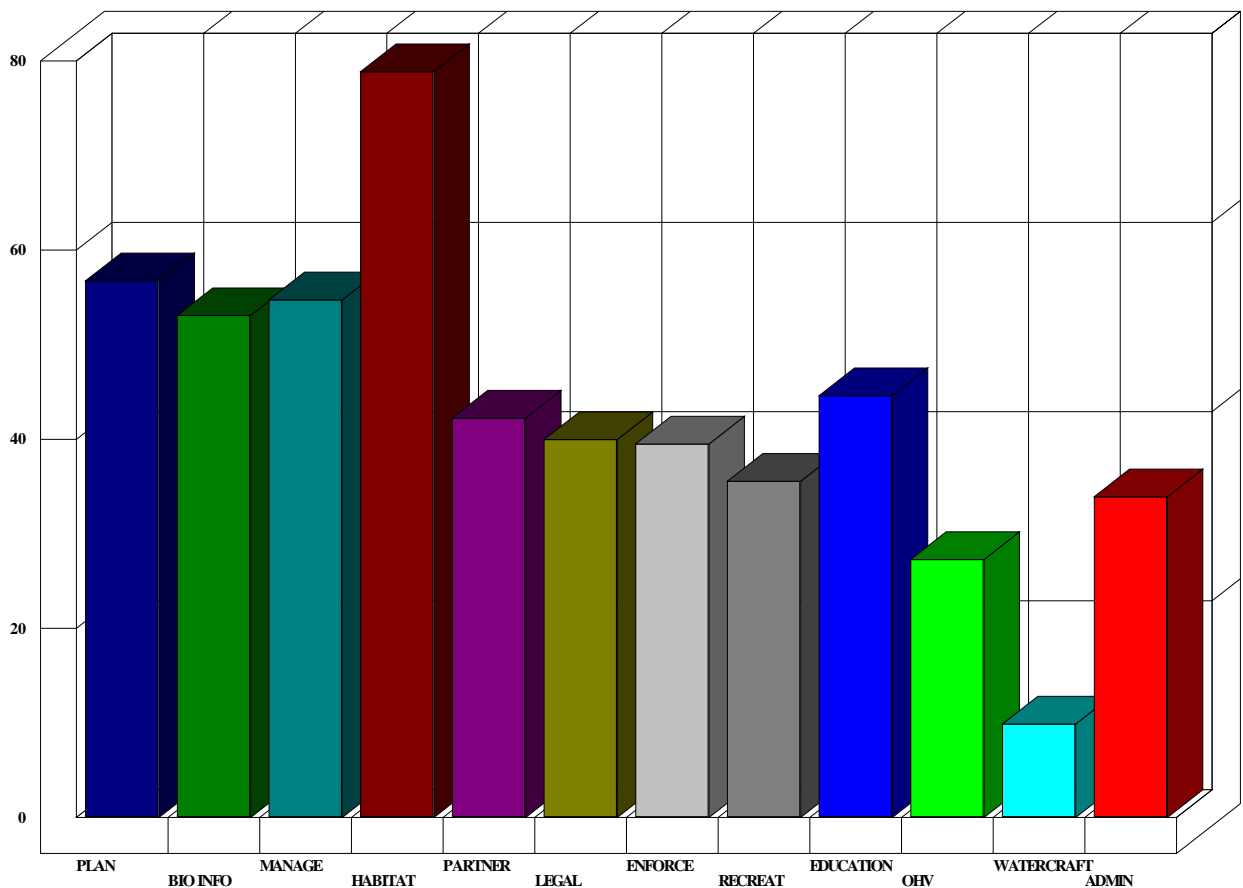
## Importance

The participants ranked the importance of the 12 challenges as follows:

- |                              |                                    |
|------------------------------|------------------------------------|
| 1. Wildlife Habitat          | 7. Laws and Legal Considerations   |
| 2. Planning and Funding      | 8. Law Enforcement                 |
| 3. Wildlife Management       | 9. Wildlife Recreation             |
| 4. Biological Information    | 10. Administrative Challenges      |
| 5. Information and Education | 11. Off-Highway Vehicle Management |
| 6. Partnerships              | 12. Watercraft Management          |

Figure A-6 shows the difference in how much more important each challenge was to the group. There were significant differences in the most important wildlife habitat (value=78.9) and the least important watercraft management (value=9.9.)

**Figure A-6: 12 Challenges by Importance**



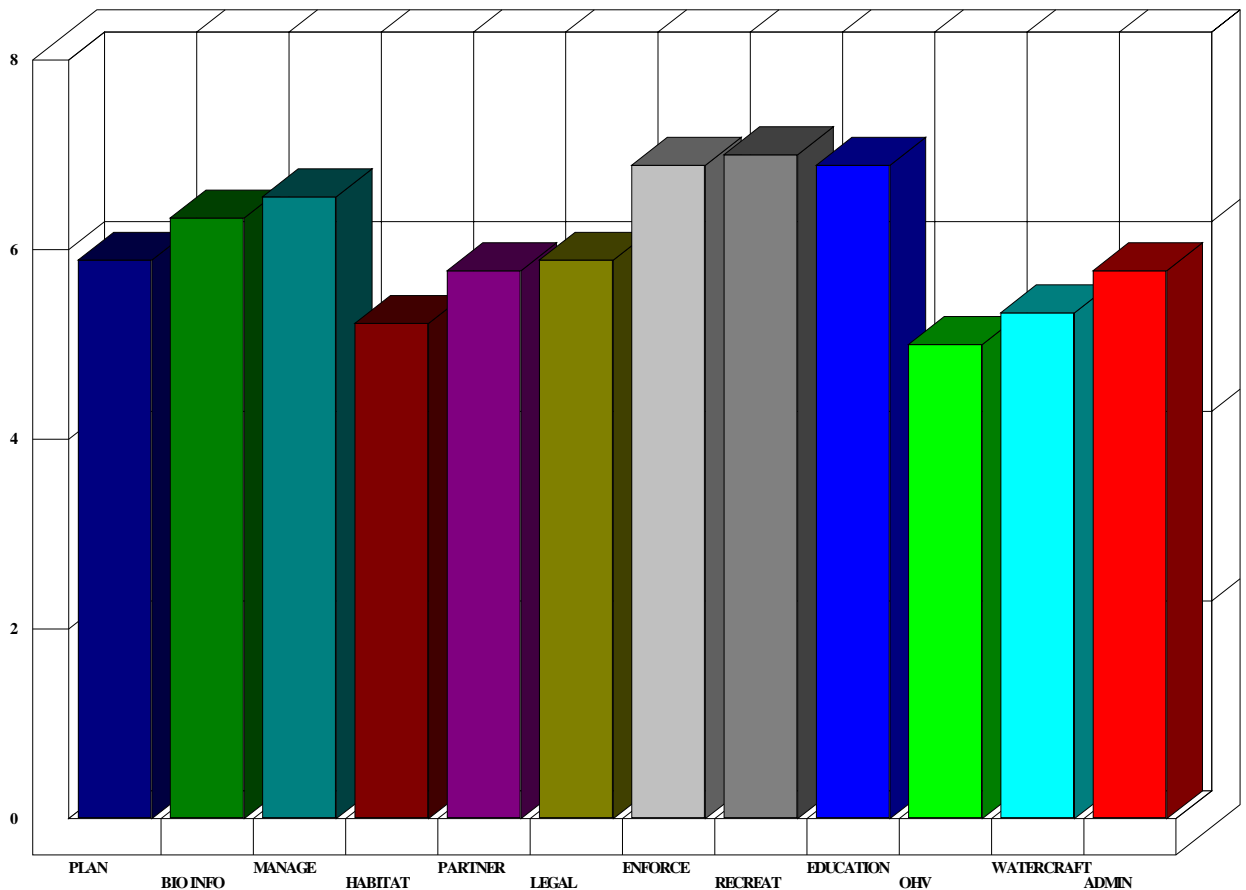
## Performance

Participants also were asked to rate the current performance of the AZGFD in fulfilling each of the challenges today. A scale of 1-9 was used (9=practically perfect; 5=just getting by; 1=not at all.) All of the 12 challenges received a rating of 5 or higher. According to the participants, AZGFD is performing the best on the following 5 challenges:

1. Wildlife Recreation
2. Law Enforcement
3. Information and Education
4. Wildlife Management
5. Biological Information

Figure A-7 shows how the participants rated the performance on each of the 12 challenges.

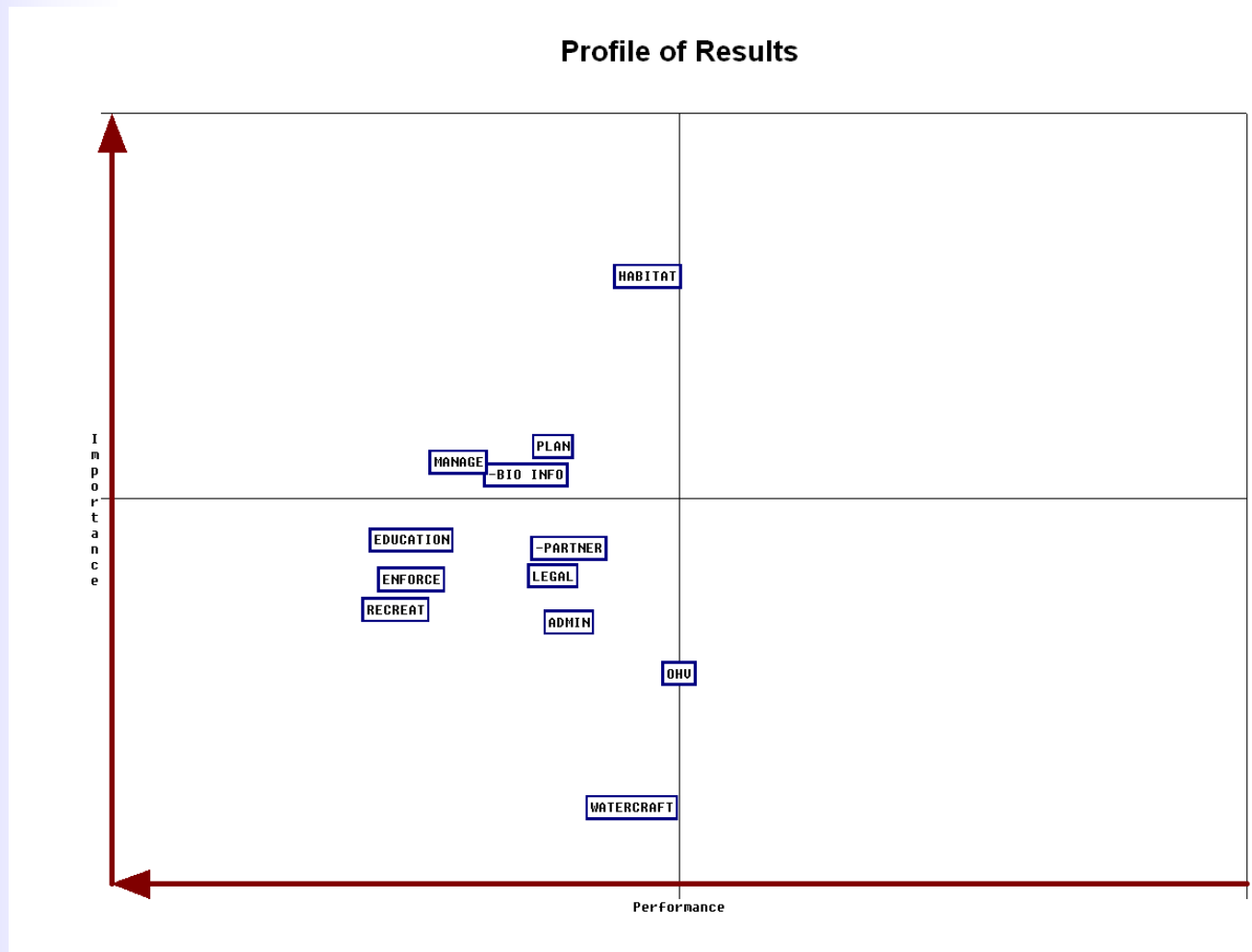
**Figure A-7: Current Performance by Challenge**



## Profile Interpretation

The CoNexus® software creates a profile showing the relationship between the importance rankings and performance ratings. Figure A-8 shows the importance from top to bottom; the higher the challenge on the profile the more important it was to the participants. Performance is measured from right to left; the further left the challenge is on the profile the better the Department is performing.

**Figure A-8: Comparison of Importance and Performance**



## Group Discussion

### Off-highway vehicle management:

- Maybe people believed that several of the topics covered more than one issue. Off-highway vehicle manager could be part of law enforcement or habitat management, for example.
- The results probably reflect the makeup of the group. I don't think anyone here is an OHV enthusiast.

### Habitat Management:

- I don't think Game and Fish has a lot of say-so about habitat management. That seems to be more a function of the federal government and tribal agencies. Game and Fish manages the wildlife.
- It could be a marketing issue. Game and Fish may be doing a great job of managing wildlife habitat but nobody knows it.

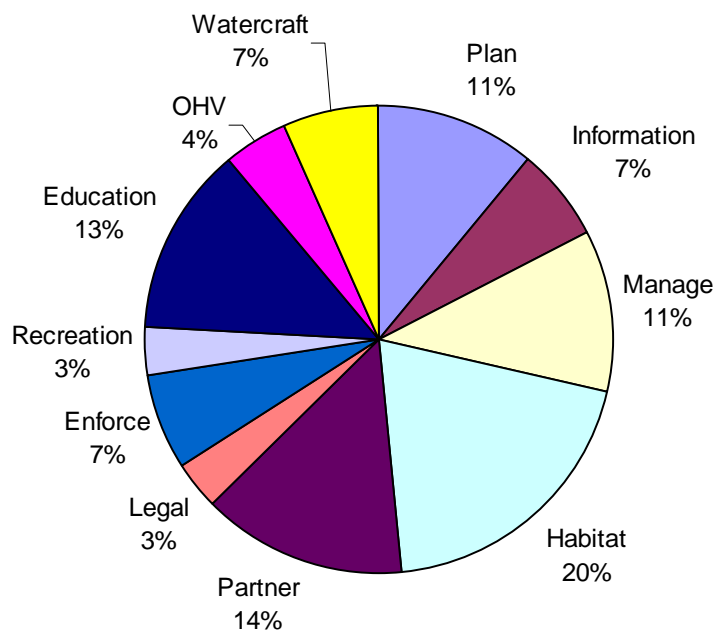


## Funding

Each participant was given ten gold coins representing \$100. At the back of the room were 12 folders – one for each challenge. The participants were asked to spend their money as they felt appropriate. They were instructed to spend all of their money and not to break any of the coins.

Figure A-9 shows that the participants spent 20% of their money on wildlife habitat; their most important challenge (as shown on Figure A-6). The next highest funded challenge (14%) was partnerships which was sixth in importance. As representatives of wildlife agencies, the participants stated they felt the additional funding would enable them to develop more effective partnerships with AZGFD resulting in enhanced protection of wildlife habitat.

**Figure A-9: Money Spent by Challenge**



## Group Discussion

- It doesn't seem there is enough money to spend. Some things probably are being short-changed.
- I would put most of my money into planning. That should cover just about everything.

- I didn't put anything into administration. I know it is necessary, but it is very hard to put a high priority on it when there are so many important Game and Fish functions and too little money to go around.
- More money probably should go into information and education.
- Most people think of Game and Fish in terms of hunting and fishing, not wildlife habitat management.
- I would put a lot into habitat management. It's just a matter of prioritizing what the agency does.

## Part 2:

# Stressors (Threats) to Arizona's Natural Habitats and Wildlife

### Stressors Identified by Individuals

**Each participant was asked to identify three stressors (threats)** to Arizona's natural habitats and wildlife that they felt were the most important to be addressed in the next ten years. This brainstorming activity resulted in the following list of stressors:

- |  |  |
|--|--|
| • Excessive recreational demand                              | • Road development   |
| • Groundwater depletion                                      | • Planning and zoning development  |
| • Urban sprawl   | • Land development – urban, suburban, 2 <sup>nd</sup> home, commercial, recreation |
| • Water use and conservation                                 | • Loss of habitat  |
| • Development  | • Fractured habitat  |
| • Habitat destruction  | • Metropolitan growth  |
| • Invasive species   | • Overuse of resources – grazing, timber, OHV, etc.                                |
| • Water – increase diversion, increase groundwater depletion | • Cattle grazing   |
| • Urban wild land conflicts                                  | • Misinformation and lack of education   |
| • Habitat fragmentation and loss                             |  |

### Stressors Identified by Groups

The participants were divided into two groups and asked to review their individual list of stressors and come to a consensus on five top stressors. The following were the ten stressors identified by the two groups:

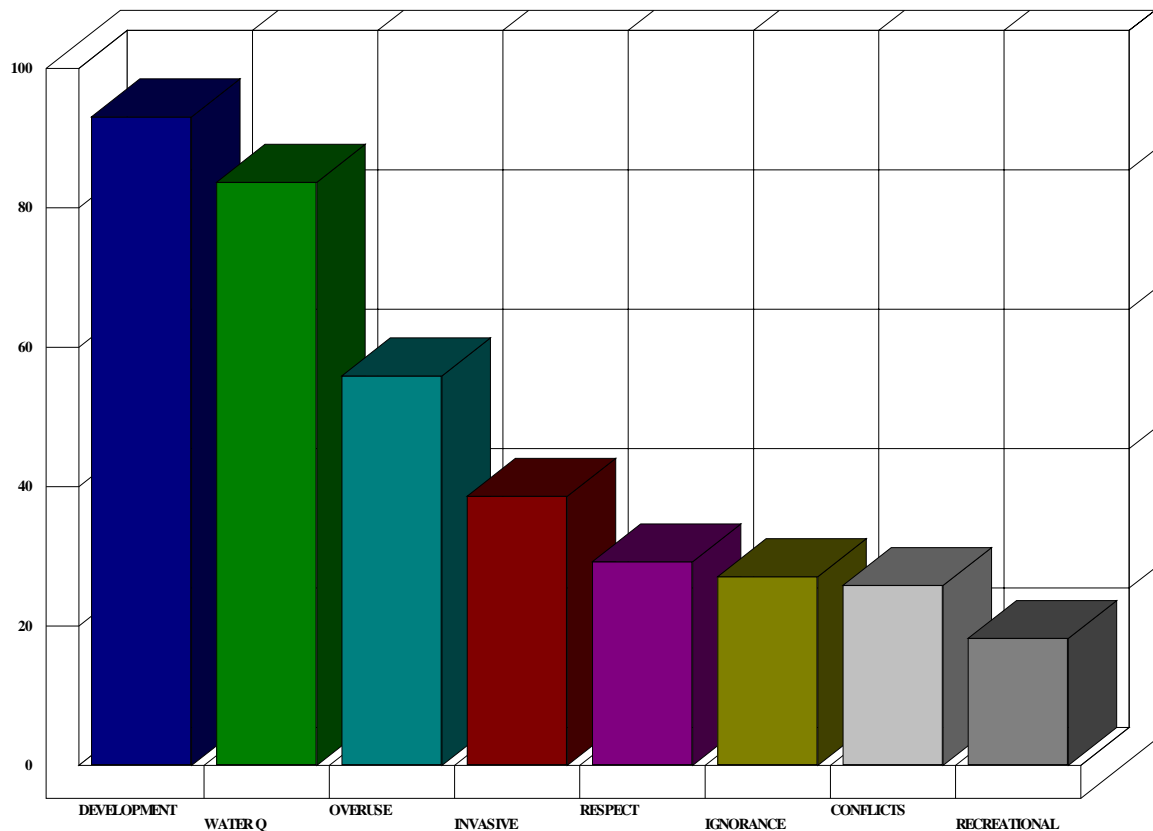
- |                                      |   |
|--------------------------------------|---|
| • Urban sprawl                       | • Increased recreational demand                 |
| • Forced habitat changes from growth | • Urban/wild land conflicts                     |
| • Water loss                         | • Misinformation/lack of education              |
| • Water                              | • Overuse of resources (cattle grazing, timber) |
| • Invasive species                   |   |
| • Invasive species                   |   |

## Stressors which are the most important for AZGFD to address in the next 10 years:

The participants defined, discussed, and combined their stressors into the following list which was voted using the CoNexus® dual-paired comparison software. The capital word in parentheses is the keyword used to identify the challenge on the CoNexus® graphs.

- **Recreational Demand** (RECREATIONAL)
- **Invasive Species** (INVASIVE)
- **Human Development** - Built environment (DEVELOPMENT)
- **Human Wildlife Conflicts** - Interface between humans and wildlife (CONFLICTS)
- **Overuse of Natural Resources** (OVERUSE)
- **Water Quantity and Quality** – Over pumping, diversions, degradation from pollution (WATER Q)
- **Lack of respect** for wildlife and resources (RESPECT)
- **Ignorance** of wildlife and resources (IGNORANCE)

**Figure A-10: Most Important Stressors**



The stress placed on habitats and wildlife by **human development** and the **lack of and degradation of water** were ranked by the participants as the most important threats to be addressed in the next 10 years. Throughout the day, the participants discussed the impacts of recreation on wildlife and habitat but voted **recreational demand** as the least important stressor.

## Group Discussion

- I really thought population growth would rank higher. That has to be the biggest single threat to wildlife.
- I'm surprised recreational demands didn't get more support. Overuse is a big problem.

## Part 3: Criteria for Identifying "Wildlife of Greatest Conservation Need"

### Criteria Identified by Individuals

**Each participant was asked to identify three factors** that should be used by AZGFD to select the "Wildlife of Greatest Conservation Need." This brainstorming activity resulted in the following list of criteria.

- |  |   |
|--|---|
| • Environmental threats                          | • Population status                         |
| • Habitat degradation                            | • Federally listed state species of concern |
| • Invasive species                               | • BLM/FS sensitive                          |
| • Invasive species                               | • Responsibility                            |
| • Balancing tourism with conservation            | • Threats                                   |
| • Water loss from streams by groundwater pumping | • Population trend                          |
| • Surface water diversion                        | • Narrow distribution                       |
| • Protecting our waterways                       | • Population size                           |

## Criteria Identified by Groups

The participants were divided into two groups and asked to review their individual list of criteria and come to a consensus on five top criteria. The following were the 10 criteria identified by the two groups.

- Federally listed T/E
- Decreased population/distribution
- Aquatic/Riparian/Wetland/species
- Identification of diversity hotspots
- Habitat incursions
- Most at risk wildlife
- Water needs by wildlife
- Population status/trends
- Habitat status/trends
- Threats status/trends

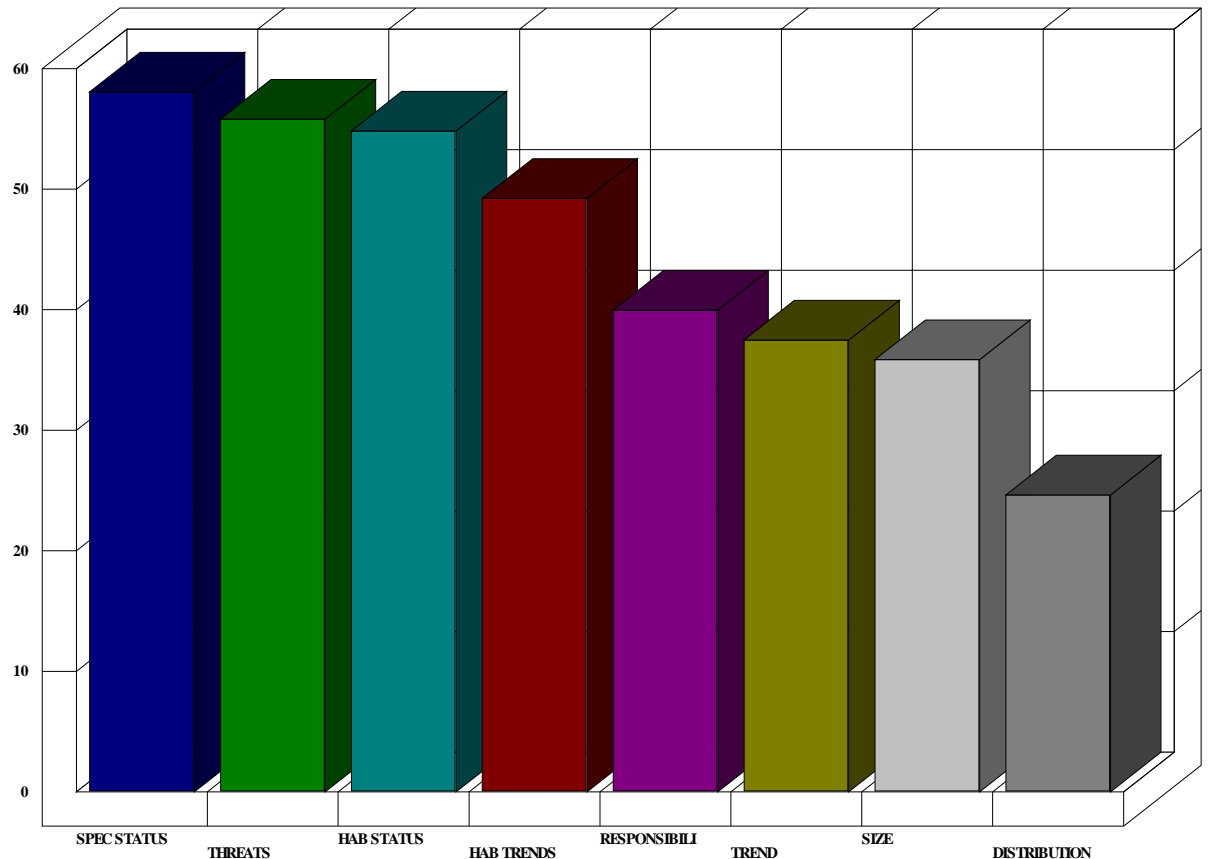


## What are the factors that AZGFD should use to determine if a species needs special attention?

The participants defined, discussed, and combined their criteria into the following list which was voted using the CoNexus® dual-paired comparison software. The capital word in parentheses is the keyword used to identify the challenge on the CoNexus® graphs.

- **Population Size** - Number of individuals in the population (SIZE)
- **Population Trend** - Increasing or decreasing over time (TREND)
- **Population Distribution** - Where they are (DISTRIBUTION)
- **Threats** - Future threats to habitat and species i.e. pollution - disease (THREATS)
- **Special Status** - Federally listed - State species of concern - BLM/FS sensitive (SPEC STATUS)
- **Responsibility** - Species so dependent on AZ that it requires special attention regardless of other factors (RESPONSIBILI)
- **Habitat Trends** (HAB TRENDS)
- **Habitat Status** (HAB STATUS)

As shown in Figure A-11 (page A-13) the most important criteria were **special status**, **threats**, **habitat status** and **habitat trends**. However, it should be noted that the group was split on whether or not the criteria should be prioritized. After lengthy discussion the group agreed to vote the pairs, but two participants declined to vote.

**Figure A-11: Criteria Ranked by Importance**

## Group Discussion

- The reason we do not want to rank these is because what may show up in one category may not show up in another, but it may be as important, if not more so and it may fall through the cracks because it was at the end of the priorities.
- The process of assessing the wildlife of greatest conservation need should take the criteria of: population trend, population size, distribution of the species, threats – including habitat threats and degree of endemism to Arizona and rank each equally in a non-prioritized or weighted process.
- I would think that the population of the species would be the most important criteria. How many are there? What are the trends?
- Using someone else's list as criteria doesn't make much sense. What this says is that the most important thing is what someone else believes is the most important thing.
- I believe we should pay attention to what others – the feds – are listing. I guess it tells Game and Fish, "don't reinvent the wheel."